

WHAT IS CLAIMED IS:

1. An apparatus for Physical Layer (PHY) signal control in local area network (LAN), said apparatus selectively generating a specific warning data, comprising:
 - a first means for connecting said PHY signal control apparatus and a Media Access Layer (MAC) means, to enable data transmission between said apparatus and said MAC means;
 - a second means for controlling said first means to selectively transfer a general data on LAN or said specific warning data to said MAC means.
2. The apparatus of Claim 1 further comprising:
 - a third means, said third means capable of storing said warning data;
 - a fourth means, said fourth means capable of recording a current transmission configuration of LAN; and
 - a fifth means, said fifth means is capable of handling general data on LAN and relaying said general data to said MAC means by means of said first means and said second means.
3. The means of Claim 2, wherein said first means includes an interface.
4. The means of Claim 2, wherein said second means includes a state machine.
5. The means of Claim 2, wherein said third means is a memory device capable of storing the specific warning data, said specific warning data comprising:

a destination address, said destination address is a broadcasting address;
a source address, said source address including 6 all-zero bytes;
an error checking data, said error checking data including 4 bytes of cyclic redundancy code (CRC).

6. The means of Claim 2, wherein said fourth means includes a register set.

7. A method for a PHY signal control apparatus to provide a specific warning data to a MAC means in a LAN, said method comprising the steps of:

- (a) checking a current external transmission configuration;
- (b) if said external transmission configuration is identical to the transmission configuration stored previously in said PHY signal control apparatus, then said PHY signal control apparatus transferring general communication data to said MAC means; and
- (c) if said external transmission configuration is different to the transmission configuration stored previously in said PHY signal control apparatus, then said PHY signal control apparatus transferring a specific warning data to said MAC means.

8. The method of Claim 7, wherein the step (c) further comprising:

- (c1) before transferring said warning data to said MAC means, updating the former transmission configuration stored in said set of registers of said PHY signal control apparatus to the current external transmission configuration; and

(c2) after transferring said specific warning data to said MAC means, a driver of said MAC means retrieves the transmission configuration stored in said set of registers of said PHY signal control apparatus, and set said MAC means to current transmission configuration, then said MAC means will operate normally according to the transmission configuration of said PHY signal control apparatus.